What is claimed:

1. A method for diagnosing melanoma which comprises:

(a) contacting a biological specimen with a probe which selectively recognizes microphthalmia (Mi); and

(b) determining whether Mi is being expressed in the specimen by the probe's binding to Mi, wherein said binding is indicative of Mi expression and, wherein the expression of Mi in a malignant cell is indicative of melanoma.

2. The method of claim 1, wherein the probe is an antibody for Mi.

3. The method of claim 1, wherein the probe the level of mRNA expressing Mi.

4. The method of claim 1, wherein the biological specimen is a malignant cell.

5. A method for determining whether a malignant cell is a melanoma comprising:

determining whether microphthalmia (Mi) is being expressed in the nucleus of the malignant cell by using a probe for Mi, wherein the expression of Mi is indicative of the malignant cell being a melanoma.

6. The method of claim 5, wherein the probe is an antibody for Mi.

7. The method of claim 6, wherein the antibody is a monoclonal antibody.

8. A kit for determining whether a malignant cell is a melanoma which comprises a probe for Microphthamia (Mi) and instructions for use.

9. The kit of claim 8, wherein the probe comprises 2 primers that permit the synthesis of human Mi and the kit further comprises reagents to carry out the polymerase chain reaction.

10. The kit of claim 8, wherein the probe is an antibody that specifically binds to human Mi, and the kit further comprises reagents that permit one to determine whether the antibody has bound to Mi.

11. The method of claim 5, wherein the level of Mi present in the nucleus is measured and compared to a base line control level of Mi.

12. The method of claim 5, wherein the activation state of the Mi in the nucleus is determined.